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## NOTICE OF ALLOWANCE AND FEE(S) DUE

2292 7590 12/03/2009 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747 EXAMINER

NEWMAN, MICHAEL A

ART UNIT PAPER NUMBER

2604

DATE MAILED: 12/03/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/550,896	09/27/2006	Hisashi Miyamori	4035-0175PUS1	1709	
TITLE OF INVENTION: IMAGE PROCESSING METHOD AND IMAGE PROCESSING APPARATUS					

 APPLN TYPE
 SMALL ENTITY
 ISSUE FEE DUE
 PUBLICATION FEE DUE
 PREV, PAID ISSUE FEE
 TOTAL FEE(S) DUE
 DATE DUE

 nonprovisional
 NO
 \$1510
 \$300
 \$0
 \$1810
 03/03/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FFE: shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

# Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This appropriate. All further indicated unless correcte maintenance fee notificat	form should be used to correspondence including a below or directed oth tions.	or transmi ig the Pate nerwise in	itting the ISSU ent, advance or Block 1, by (a	TE FEE and PUBLICAT: ders and notification of r specifying a new corres	ON FEE (if requiraintenance fees vipondence address;	ired). I vill be and/or	Blocks 1 through 5 s mailed to the current r (b) indicating a sepa	hould be completed w correspondence addre trate "FEE ADDRESS	/here ss as " for
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10/550,896	09/27/2006			Hisashi Miyamori		4	035-0175PUS1	1709	
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NEWMAN, M			2624	382-300000					
"Fee Address" indi PTO/SB/47; Rev 03-0 Number is required.  3. ASSIGNEE NAME A	ondence address (or Cha 3/122) attached. ication (or "Fee Address 2 or more recent) attach	nge of Cor "Indication red. Use of A TO BE F	respondence n form a Customer PRINTED ON	2. For printing on the p (1) the names of up to co agents OR, alternati (2) the name of a singly registered attorney or a 2 registered patent atto listed, no name will be THE PATENT (print or tyll data will appear on the p I a substitute for filing an	3 registered pater vely, e firm (having as a gent) and the nam meys or agents. If printed.	memb es of u no nan	p to p to se is 3	ocument has been file	d for
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#### UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

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10/550,896	09/27/2006	Hisashi Miyamori	4035-0175PUS1	1709
2292	7590 12/03/2009		EXAMINER	
BIRCH STEWART KOLASCH & BIRCH			NEWMAN, MICHAEL A	
PO BOX 747 FALLS CHURCH, VA 22040-0747			ART UNIT	PAPER NUMBER
			2624	

DATE MAILED: 12/03/2009

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

# Application No. Applicant(s) 10/550 896 MIYAMORI, HISASHI Notice of Allowability Examiner Art Unit MICHAEL A NEWMAN 2624 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to the amendment filed on August 18<sup>th</sup>, 2009. 2. The allowed claim(s) is/are 1-12 and 15. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) $\square$ All b) ☐ Some\* c) ☐ None of the: 1. T Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). \* Certified copies not received: \_\_\_\_\_. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

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U.S. Patent and Trademark Offi	ÇI
PTOL-37 (Rev. 08-06)	

Attachment(s)

1. | Notice of References Cited (PTO-892)

Paper No./Mail Date

of Biological Material

2. Notice of Draftperson's Patent Drawing Review (PTO-948)

4. T Examiner's Comment Regarding Requirement for Deposit

Information Disclosure Statements (PTO/SB/08).

5. Notice of Informal Patent Application

 Interview Summary (PTO-413), Paper No./Mail Date .

Other .

7. T Examiner's Amendment/Comment

8. X Examiner's Statement of Reasons for Allowance

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#### DETAILED ACTION

#### Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on August 18<sup>th</sup>, 2009 has been entered.

## Specification

 The amendments to the specification to correct minor informalities, filed on August 18th, 2009 have been entered.

#### Response to Amendment

- 3. The amendment filed on August 18th, 2009 has been entered.
- In view of the amendment to the claims, the amendment of claims 1 12 and 15 has been acknowledged. Claims 13 and 14 were previously cancelled.
- In view of the amendment to claims 1 and 7, the 35 U.S.C. 103 rejection of claims 1 – 4, 6 – 10 and 12 has been withdrawn.
- In view of the amendment claims 1 12 and 15, the 35 U.S.C. 112 2<sup>nd</sup> rejection of claims 1 12 and 15 has been withdrawn.

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a.

#### Response to Arguments

Applicant's arguments, see pages 12 – 17 of the Remarks, filed on August 18<sup>th</sup>,
 2009, with respect to the rejections of the claims have been fully considered and are persuasive. The rejections have been withdrawn.

#### Allowable Subject Matter

- Claims 1 12 and 15 frenumbered as 131 are allowed.
- 9. The following is an examiner's statement of reasons for allowance:
  - through segmentation even when partially occluded. Specifically, the claimed invention extracts, segments and removes lined-shaped image objects overlapping moving objects in an image. Eliminating the overlapping lined-shaped image object carries a risk of separating the moving image object at the location where the lined-shaped image object overlapped. The invention addresses this issue by performing the claimed selective interpolation technique in the regions where the overlapping lined-shaped image object has been eliminated. The claimed specifics of the elimination and interpolation techniques are not taught by the cited prior art, either alone or in combination.

The claimed invention allows moving objects to be accurately tracked

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably Application/Control Number: 10/550,896

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accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL A. NEWMAN whose telephone number is (571) 270-3016. The examiner can normally be reached on Mon - Thurs from 9:30am to 6:30pm (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh M. Mehta can be reached on (571) 272-7453. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Bhavesh M Mehta/

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Supervisory Patent Examiner, Art Unit 2624

M.A.N.